

Title (en)

PHOTOVOLTAIC CELL COMPRISING A PHOTOVOLTAIC ACTIVE SEMICONDUCTOR MATERIAL

Title (de)

PHOTOVOLTAISCHE ZELLE MIT EINEM PHOTOVOLTAISCH AKTIVEN HALBLEITERMATERIAL

Title (fr)

PILE PHOTOVOLTAIQUE CONTENANT UNE MATIERE SEMI-CONDUCTRICE A ACTION PHOTOVOLTAIQUE

Publication

EP 1807872 A1 20070718 (DE)

Application

EP 05798238 A 20051026

Priority

- EP 2005011461 W 20051026
- DE 102004052012 A 20041026

Abstract (en)

[origin: US7847187B2] The invention relates to a photovoltaic cell comprising a photovoltaically active semiconductor material, wherein the photovoltaically active semiconductor material is a p- or n-doped semiconductor material comprising a binary compound of the formula (I) or a ternary compound of the formula (II): ZnTe (I) $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ (II) where x is from 0.01 to 0.99, and a particular proportion of tellurium ions in the photovoltaically active semiconductor material has been replaced by halogen ions and nitrogen ions and the halogen ions are selected from the group consisting of fluoride, chloride and bromide and mixtures thereof.

IPC 8 full level

H01L 31/032 (2006.01); **C30B 29/48** (2006.01); **H01L 31/0296** (2006.01)

CPC (source: EP KR US)

C30B 23/02 (2013.01 - EP US); **C30B 29/48** (2013.01 - EP KR US); **H01L 21/02562** (2013.01 - EP US); **H01L 21/02568** (2013.01 - EP US); **H01L 21/02573** (2013.01 - EP US); **H01L 31/0296** (2013.01 - KR); **H01L 31/02963** (2013.01 - EP US); **H01L 31/032** (2013.01 - EP KR US); **H01L 31/0321** (2013.01 - EP US); **H01L 31/068** (2013.01 - EP US); **H01L 31/1828** (2013.01 - EP US); **Y02E 10/543** (2013.01 - EP US); **Y02E 10/547** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2009133745 A1 20090528; US 7847187 B2 20101207; AT E554502 T1 20120515; AU 2005298837 A1 20060504; AU 2005298837 B2 20110224; CA 2585166 A1 20060504; CA 2585166 C 20130423; CN 101048877 A 20071003; CN 101048877 B 20100512; DE 102004052012 A1 20060427; EP 1807872 A1 20070718; EP 1807872 B1 20120418; JP 2008518449 A 20080529; JP 4589400 B2 20101201; KR 101152493 B1 20120601; KR 20070084275 A 20070824; NZ 554547 A 20090925; TW 200620689 A 20060616; WO 2006045600 A1 20060504

DOCDB simple family (application)

US 71803905 A 20051026; AT 05798238 T 20051026; AU 2005298837 A 20051026; CA 2585166 A 20051026; CN 200580036891 A 20051026; DE 102004052012 A 20041026; EP 05798238 A 20051026; EP 2005011461 W 20051026; JP 2007538327 A 20051026; KR 20077011118 A 20051026; NZ 55454705 A 20051026; TW 94137544 A 20051026